





5 POINTS GATEWAY AREA ENHANCEMENT STUDY

DECEMBER 2004

Prepared for

CITY OF BETHLEHEM

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Table Of Contents

1.	5 Po	ints Gateway Area Enhancement Study Executive Summary	1
		Executive Summary	2
		Short-Term Actions	3
		Mid-Term Actions	3
		Long-Term Actions	3
2.		ints Gateway Area Enhancement Study Final Report	7
		Introductions/Study Background	8
		Data Collection/Analysis	10
		Public Meeting #1 January 12, 2004	15
		Alternative Analysis	15
		Public Meeting #2	18
		The 5 Points Gateway Enhancement Concept	18
	VII.	5 Points Gateway Enhancement Concept: Action Plan	19
		i. Short-Term Actions (0-6 months)	19
		ii. Mid-Term Actions (6-24 months)	19
		iii. Long-Term Actions (24+ months)	19
	VIII.	Conclusion	23
Fig	ures/Ta	bles/Appendix:	
Exe	cutive S	Summary	
	Figu	re 5: Short-Term Actions	5
	Figu	re 6: Mid-Long-Term Recommendations	6
Fin	al Repo	rt	
	Figu	re 1: Study Area	9
	Figu	re 2: Study Area Street Network	11
	Figu	re 3: Parking Map	14
	Figu	re 4: Conceptual One-way Couple	17
	Figu	re 5: Short-Term Actions	21
	Figu	re 6: Mid-Long-Term Recommendations	22
Tal	oles		
	Tabl	e 1: Existing Overall LOS	12
		le 15	25
Apı	oendix		
		endix "A"	24
		endix "B"	30

5 POINTS GATEWAY AREA ENHANCEMENT STUDY

EXECUTIVE SUMMARY

Executive Summary

The 5 Points Gateway Area (5 Points) has been studied on and off for about the last thirty years. Solutions that address the complicated interrelated issues that impact the overall quality of life in 5 Points have been elusive. The Southside Vision 2012 Master Plan identified 5 Points as a high priority area for revitalization. City programs like the Blight Elimination and Abatement Response (BEAR) Program have also targeted the 5 Points for revitalization.

The 5 Points Gateway Enhancement Study (Study) is a comprehensive approach in dealing with the issues that impact the quality of life in 5 Points as well as supplement existing targeted efforts like BEAR. The primary focus of the Study was aimed to:

- o Improve pedestrian safety
- o Add to the parking inventory
- o If possible, also improve traffic flow

The Study did not examine previous decisions made in the area and place a value judgment on them as good or bad, right or wrong. Instead, existing conditions were identified and a strategy was developed on how to best address the current issues and move forward.

Numerous alternatives were explored, however, only one was found to meet the two primary objectives as well as improve traffic flow. The alternative has been developed into a comprehensive enhancement concept for the area called, The 5 Points Gateway Enhancement Concept (Concept). The Concept incorporates the use of a one-way couple traffic pattern, to allow for the addition of on-street parking and streetscape improvements that increase pedestrian safety and support the overall economic revitalization efforts of the area.

The City has presented the Concept to emergency service providers, Department of Public Works and PennDOT. All feel the Concept could work and did not identify any "fatal flaws", however a number of questions must be satisfied if the project moves into the next phase of Preliminary Design. In addition, the City Planning Bureau felt the Concept supports the vision presented in the Southside Master Plan for 5 Points Gateway area.

Two public meetings and numerous one-on-one interviews with local businesses were held during the course of the study. The concept was also presented to City Council at a public meeting on November 4, 2004. Generally, the public supports the concept because it returns on-street parking, provides loading areas in front of stores along Wyandotte Street, improves pedestrian safety, creates an opportunity for additional streetscape enhancements, and reduces peak-hour time travel for through and local traffic. The major concern to be addressed in the next phase is the impact of changing travel patterns or commercial establishments.

The next step is to move from the Concept to preliminary design. Preliminary design will answer questions regarding design and cost and allow the City to make an informed decision on moving forward with the implementation of the concept. The attached action plan provides a time frame with the recommended next steps.

5 Points Gateway Enhancement Concept: Action Plan

SHORT-TERM ACTIONS – (0-6months)

The following short-term actions are not meant to be permanent solutions but rather "band-aid" improvements until a more permanent long-term solution can be put in place. These improvements are relatively low in cost and can be implemented quickly. (Figure 5)

Traffic

- 1. Optimize Traffic Signals
- 2. Start Preliminary Design on 5 Points Gateway Improvement Concept
- 3. Apply for funding to implement improvements

Parking

- 1. Begin negotiations to secure Parking at 4th and Wyandotte and Flat Iron Garage.
 - The current lease expires at the end of 2006. The lot is important to the merchants of the area. If garage can be secured, permit parking should be moved from the lot to the garage and the lot should be metered for patrons of the area's businesses. This provides short-term relief for the parking lost in the 400 block of Wyandotte St.

Pedestrian Safety

- 1. Re-paint Cross walks
- 2. Work with Police Department and the Bethlehem Area School District to have crossing guards stationed at the 5 Points Gateway Area Intersections

MID-TERM ACTIONS (6-24 months)

The following Mid-term Actions will provide the necessary design work for the 5 Points Gateway Enhancement Concept. Detailed cost estimates will be prepared and phasing for implementation will be examined (See Figure 6). This work should be conducted in close coordination with the Route 412 Final Design effort.

General

1. Continue Design of 5 Points Gateway Enhancement Concept

Traffic

- 1. Perform Required PennDOT Studies/Design to Implement One-way Couple Traffic Alternative
- 2. Investigate Signage Improvements

Parking

1. Continue investigating acquisition of properties for additional parking and gateway improvements

Pedestrian Safety

- 1. Design streetscape improvements consistent with City wide design criteria
 - Traffic Calming Measures
 - o Textured Crosswalks
 - o Bulb-outs
 - Decorative Lighting
 - Landscaping

LONG-TERM ACTIONS (24+ months) (Figure 6)

General

1. Implement 5 Points Gateway Enhancement Concept

Traffic

- 1. Implement one-way couple traffic alternative
- 2. Implement signage improvements

Parking

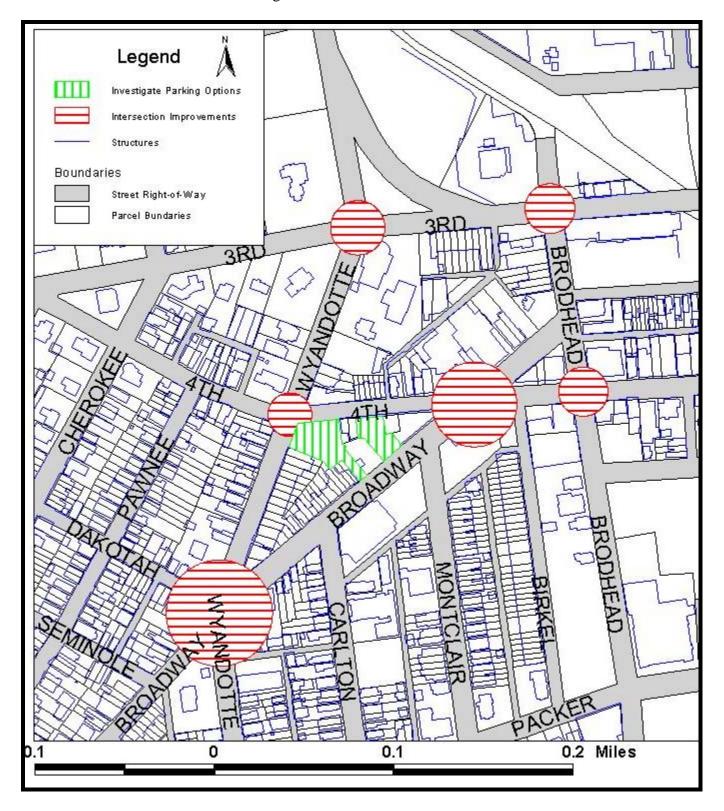
1. Continue investigating acquisition of properties for additional parking and gateway improvements

Pedestrian Safety

- 1. Implement Streetscape Improvements
 - Traffic Calming Measures
 - o Textured Crosswalks
 - o Bulb-outs
 - Decorative Lighting
 - Landscaping

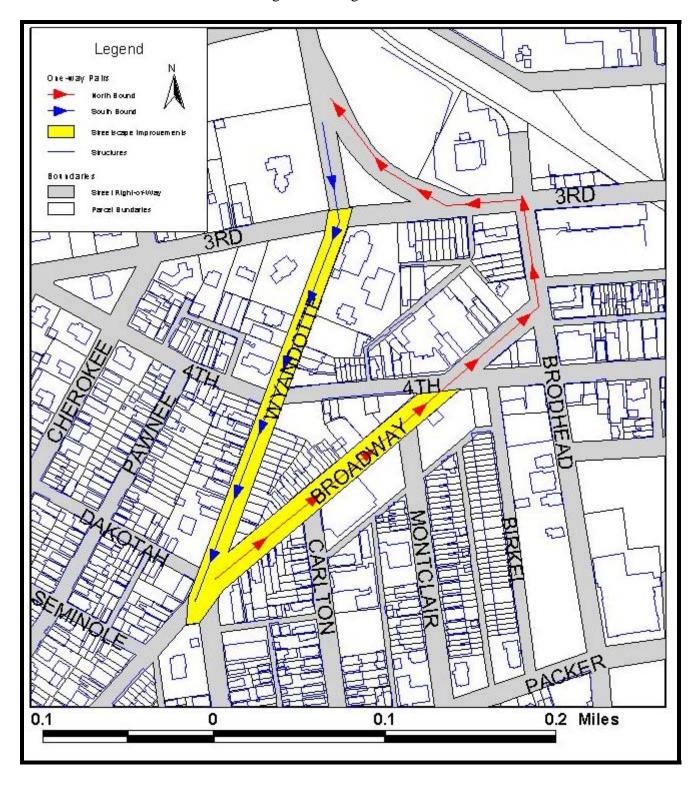
Short-Term Actions

Figure 5: Short-Term Actions



Mid-Long Term Actions

Figure 6: Long-Term Actions



5 POINTS GATEWAY AREA ENHANCEMENT STUDY

FINAL REPORT

I. Introduction/Study Background

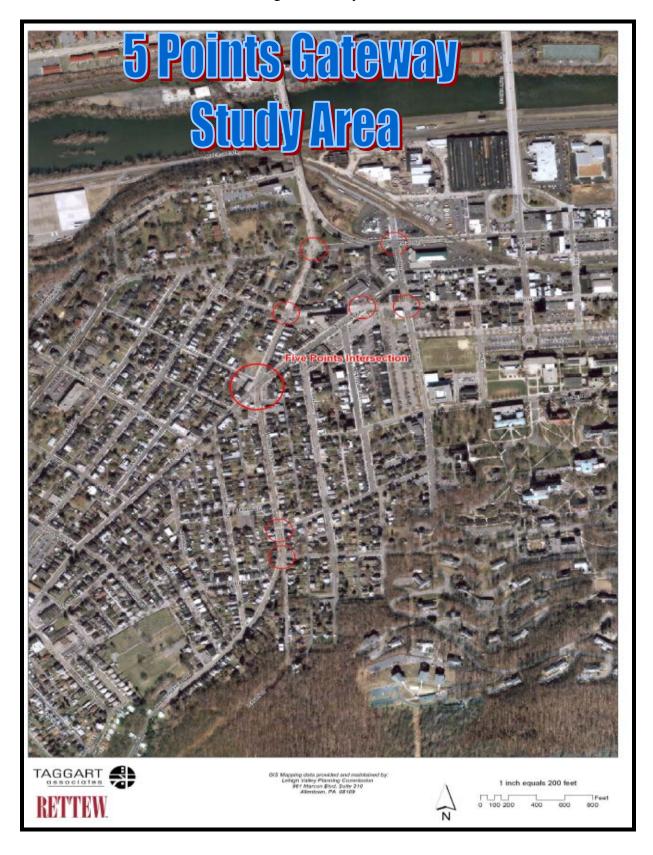
The 5 Points Gateway Area (5 Points) was identified in the Southside Vision 2012: Southside Bethlehem Residential Master Plan 2002-2012 as a regional gateway into the City of Bethlehem and its Southside. The plan explained that gateways are an important way to inform residents and visitors that they have entered a special area. The report cited parking, pedestrian safety, and vehicular circulation problems that have contributed to the demise of a successful mixed use neighborhood into a blighted area. In addition, development and increasing traffic volumes have compounded existing conditions and impacted local businesses. The Master Plan identified the 5 Points as one of four critical projects that require thoughtful improvements and recommends the area receive careful consideration to create a compatible mix of commercial and retail uses that meet the needs of the neighborhood.

The 5 Points has traditionally been on of the most congested areas in the City during peak hours of the day. The road is asked to serve many functions due to its geographic location and these functions are not always compatible. The 5 Points is a major river crossing, serves as an important link in the regional transportation system of the Lehigh Valley and helps move local traffic. In addition, the area is a neighborhood and commercial district for local residents as well as a gateway in to the City for Bethlehem's many visitors. Conditions in the 5 Points are only expected to become more complex as anticipated growth occurs from the redevelopment of 1,800 acre Brownfield once occupied by Bethlehem Steel, the revitalization of Bethlehem's Southside and development in surrounding municipalities.

The City commissioned this study to examine the interrelationships of the parking, pedestrian safety, and traffic conditions within the 5 Points and develop a cohesive strategy to address the deficiencies identified by the study consistent with the Master Plan. Since this area has been studied numerous times, an emphasis was placed on thinking "outside the box" for solutions that balance the complex issues of the area and reflect community values. While the primary focus of the study is the immediate vicinity of the 5 Points intersection and the Wyandotte St./Route 378 Corridor, the Study Area (see Figure 1) includes a system of seven (7) signalized intersections that are interdependent upon each other.

A cohesive strategy was developed that includes an immediate action plan that can implement small changes very quickly, a mid-term action plan, and a vision that provides a policy direction to evaluate long-term opportunities.

Figure 1: Study Area



II. Data Collection/Analysis

The following section of this report is a summary of the data collected and its analysis. More detailed information is in the technical file unless otherwise noted.

A. Background Studies

Prior traffic, parking, and planning studies pertinent to the 5 Points Gateway Area were reviewed, including:

- Route 412 Improvement Project
- South Side Bethlehem Master Plan
- Southside Vision 2012: Southside Bethlehem Residential Master Plan 2002-2012
- Bethlehem VISION Comprehensive Plan
- McDonald's Traffic Impact Study
- Traffic Impact Study for the Rezoning of the Five Points Intersection
- BethWorks Parking Inventory
- BethWorks Traffic Study

B. Traffic Data

A.M. and P.M. peak-hour traffic counts (7A.M.-9A.M. 4P.M.-6P.M.) were taken for the following study area intersections:

- Third Street and Wyandotte Street
- Third Street and Brodhead Avenue
- Fourth Street and Wyandotte Street
- Fourth Street and Broadway Avenue
- Fourth Street and Brodhead Avenue
- Broadway Avenue and Wyandotte Street
- Third Street Ramp and Wyandotte

A.M. peak-hour counts were taken at the following study area intersections:

- Summit Street and Wyandotte Street
- Summit Street and Brodhead Avenue
- Fourth Street and Delaware Avenue
- Dakotah Street and Delaware Avenue

Peak hour Level of Service (LOS) was determined for each intersection based on existing and projected future traffic conditions. This provides the benchmark to compare the impact of alternatives. LOS is based upon the amount of time delay a vehicle experiences when traveling through an intersection. LOS ranges from LOS A (minimal or no delay) to LOS F (delay greater than 80 seconds). In urban areas, LOS C is considered the acceptable standard. Figure 2 shows the study area's street network and Table 1 shows the existing and projected LOS for each intersection under current traffic patterns.

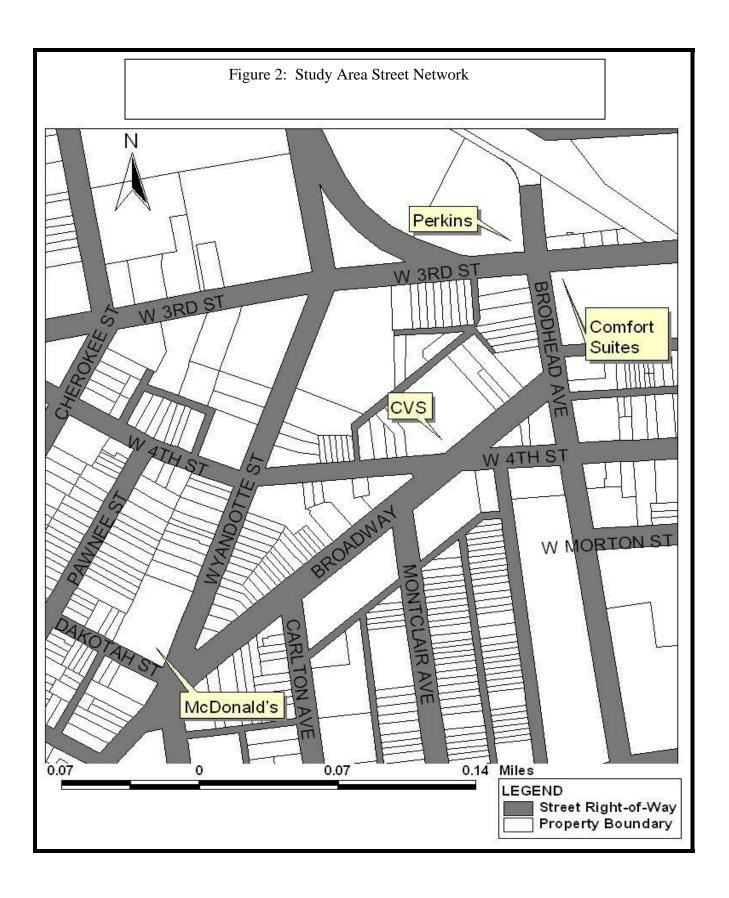


Table 1: Existing Overall LOS

	Exist	Existing Overall LOS							
INTERSECTION	AM 2004	PEAK	PM 2004	PEAK		AM 2014	PEAK	PM 2014	PEAK
3rd St./ Rt. 378	B		B			D		В	
3rd St./Wyandotte	D		Е			Е		F	
4th St./Wyandotte	A		В			В		С	
5 Points Intersection	С		Е			Е		F	
4th St./Broadway	В		В			В		С	
4th St./Brodhead	С		С			С		С	
Broadway/Brodhead	N/A		N/A			N/A		N/A	
3rd St./ Brodhead	В		В			В		С	

Under current conditions, the Third and Wyandotte intersection operates at or below LOS D. Projected future conditions indicate that Third and Wyandotte and the 5 Points intersection will operate below an overall LOS E in the AM Peak and LOS F in the PM peak hour. Other intersections in the network operate anywhere from LOS A to LOS C, showing that some excess capacity exists at the other intersections in the system.

C. Parking Data

A parking inventory of all public and some private parking was taken and occupancy/vacancy rates were collected for all public lots and metered parking in the study area. Figure 3 shows the parking areas examined in the study area. The parking inventory found that approximately 14 spaces in the Flat Iron Garage are typically vacant, about one third of the garage's capacity. More efficient use of the Flat Iron garage could alleviate some of the parking issues on Wyandotte Street between Third Street and the 5 Points Intersection.

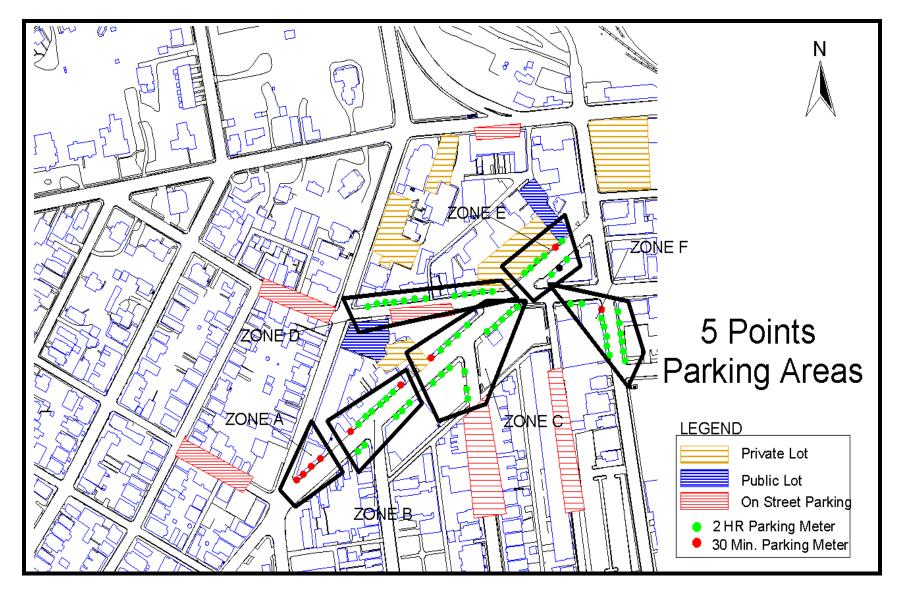
D. Accident Data

City and State accident data was collected and reviewed. The City of Bethlehem prepares accident reports for all accidents reported. A three-year summary of the number of City accident reports within the study area was gathered. The City's electronic accident data only records when and where an accident occurred. To examine the details of the accident one must cross reference the individual accidents to their hand written accident report. Therefore, for the purposes of this study, City accident data was used to provide order of magnitude only.

The State's electronic accident data provides considerably detail, but the State has stringent standards as to what accidents are "reportable". According to Anthony F. Tomczak, PennDOT Safety Engineer, Engineering District 5-0, "a reportable accident is one in which an injury or fatality occurs or if at least one of the vehicles involved requires towing from the scene." Using this list for the safety-related planning purpose of this Study, our analysis found that accident rates along Wyandotte are not abnormal when compared to other similar roads.

In fact Wyandotte is below the statewide average. By contrast, Fourth Street and Broadway Avenue have accident rates that are two and three times higher than the statewide average. The State's accident data will not be kept in the public technical files, as they are confidential respectively under 75 PA C.S. Section 3754 and 23 U.S.C. Section 409.

Figure 3: Parking Map



III. Public Meeting #1 January 12, 2004

A public meeting was held at The Cathedral Church of Nativity on the corner of Third St. and Wyandotte on Monday, January 12, 2004. The purpose of the meeting was to solicit public input on:

- The needs/problems/issues of the 5 Points, and
- Options/solutions that could address the needs/problems/issues of the 5 Points. Approximately 40 to 50 people attended the open house format meeting. All attendees were asked to fill out a questionnaire designed to help planners and engineers understand their issues and concerns. The public identified three specific needs for the area:
 - Need to improve pedestrian safety
 - Need to create more accessible parking for residences and businesses
 - Need to improve traffic flow

IV. Alternatives Analysis

Unfortunately, there is no "cure-all" to addressing the complex interrelated needs of the 5 Points. Trade-offs will have to be made in order to find a successful solution. Numerous alternatives were examined and evaluated based upon how well they met the study's identified needs, the cost to implement them, the length of time to implement the improvement, and its ability to receive support from the public and PennDOT.

A. Alternatives Examined

- Change existing traffic patterns to traffic patterns that existed prior to the development of McDonalds.
 - This alternative is not recommended because it could create an unsafe condition for left-hand turns into the McDonald's. In addition, it will not address the longterm needs of the area as traffic volumes increase.
- Roundabout at the 5 points intersection
 - This alternative was not recommended due to the large amount of Right-of-Way acquisitions required, the high implementation costs, and the length of time to implement.
- Pedestrian over/under-pass
 - o This alternative was not recommended due to high implementation costs, aesthetic concerns and safety concerns.
- All pedestrian walk phase
 - o Not recommended under current traffic patterns due to the impact on LOS. In addition, there is insufficient evidence regarding the merits of this alternative to receive PennDOT support based upon our accident analysis.

Major Widening

 This alternative was not recommended because it would not support the character of the neighborhood, high implementation costs, and the length of time to implement.

One-way Couple

O The analysis preformed on this alternative was promising. This alternative would change Wyandotte from Third Street to the 5 Points intersection to one-way southbound. Traveling northbound, Broadway Avenue would become one-way northbound connecting into the Third Street Ramp via Brodhead Avenue (see Figure 4). The rationale behind the one-way couple alternative is to eliminate left turning movements at key intersections and distribute traffic to intersections with excess capacity. Initial analysis of this alternative is promising, but additional detailed analysis is needed.

Conceptual
One-way Couple
Alternative Wyandotte St. 4th Street McDonald's Brodhead 5 Points Intersection
Proposed Traffic Pattern

Figure 4: Conceptual One-way Couple

V. Public Meeting Number #2

A second public meeting was held at The Cathedral Church of Nativity on the corner of Third St. and Wyandotte on May 25, 2004 to present the Draft Findings and Recommendations of the study. Approximately 40-50 people attended the meeting. According to the results of a questionnaire distributed at the meeting, the findings were well received. Response to the recommended one-way couple alternative was generally well received, though several questions were raised that cannot be answered without further analysis is completed. The length of time to implement most of the recommendations was a troublesome issue for most residents. A detailed summary is available in the technical file.

VI. The 5 Points Gateway Enhancement Concept

The 5 Points Gateway Enhancement Concept (Concept) is a comprehensive approach to deal with the Pedestrian Safety, Parking, and Traffic Issues associated with the 5 Points Gateway Area. The Concept incorporates the One-way Couple alternative discussed under the section IV and is compatible with existing City programs such as the Blight Elimination and Abatement Response (BEAR) Program and Local Economic Revitalization Tax Assistance (LERTA) Program. The Concept is intended to be the overall approach in dealing with the complex issues associated with the area but it may have to be implemented in stages due to funding issues.

Based upon the positive feedback from Public Meeting #2, a conceptual plan was developed for the Concept in order to perform more detailed analysis. The conceptual plan shows the one-way couple alternative with proposed streetscape improvements such as bulb-outs. A head-to-head comparison (See Appendix "A" for tables and Figures) of the existing traffic pattern and the proposed one-way couple showed that the one-way couple reduces congestion, while providing adequate space to return on street parking to the 400 block of Wyandotte. Some right-of-way acquisition will be needed in the area of the Third and Wyandotte intersection. The Concept is the only alternative analyzed by this study that satisfies all of the identified needs listed in Section III.

The project team met with PennDOT and emergency service operators to review the conceptual plan. No major issues were raised that would render the project infeasible at this time. Additional design and analysis is needed in order to comply with PennDOT design standards. It is important to keep in mind that this is a conceptual plan and that the details may change as the project moves forward in the design process.

Some of the positive impacts associated with the Concept include

- Addresses all the identified community needs.
- Return of metered, on street parking to the 400-block of Wyandotte Street
- Space for streetscape improvements like bulb-outs, decorative lighting, and landscaping.
- Relieves congestion and improves traffic flow.
- Increases overall pedestrian safety.

As mentioned earlier, regardless of the improvement, trade-offs will be required. Some negative impacts associated with implementing the one-way pair alternative include:

- Decreased accessibility to businesses.
- Additional Right-of-Way requirements.
- Additional time & funds to design and implement.

VII. 5 Points Gateway Enhancement Concept: Action Plan

A. SHORT-TERM ACTIONS – (0-6months)

The following short-term actions may improve current conditions in the study area until more permanent long-term solutions can be put in place. These improvements are relatively low in cost and can be implemented quickly. (Figure 5)

Traffic

- 1. Optimize traffic signals
- 2. Start Preliminary Design on 5 Points Gateway Enhancement Concept
- 3. Apply for funding to implement improvements

Parking

- 1. Begin negotiations to secure parking at 4th and Wyandotte and Flat Iron Garage
 - This lot is currently leased and the lease expires at the end of 2006. The lot is important to the merchants of the area. If the City can secure access to this garage, we recommend moving permit parking from the lot to the garage and turning the lot into metered parking for patrons of the area's businesses. This would provide short-term relief for the parking lost in the 400 block of Wyandotte St.

Pedestrian Safety

- 1. Re-paint cross walks
- 2. Work with School District and Police Department to have crossing guards stationed at the 5 Points Gateway Area Intersections

B. MID-TERM ACTIONS (6-24 months)

The following mid-term actions will provide the necessary design work for the 5 Points Gateway Enhancement Concept. These actions would lead to the preparation of cost estimates and implementation schedules (See Figure 6).

General

1. Continue design of 5 Points Gateway Enhancement Concept

Traffic

- 1. Perform required PennDOT Studies/Design to implement one-way couple traffic alternative
- 2. Investigate signage improvements

Parking

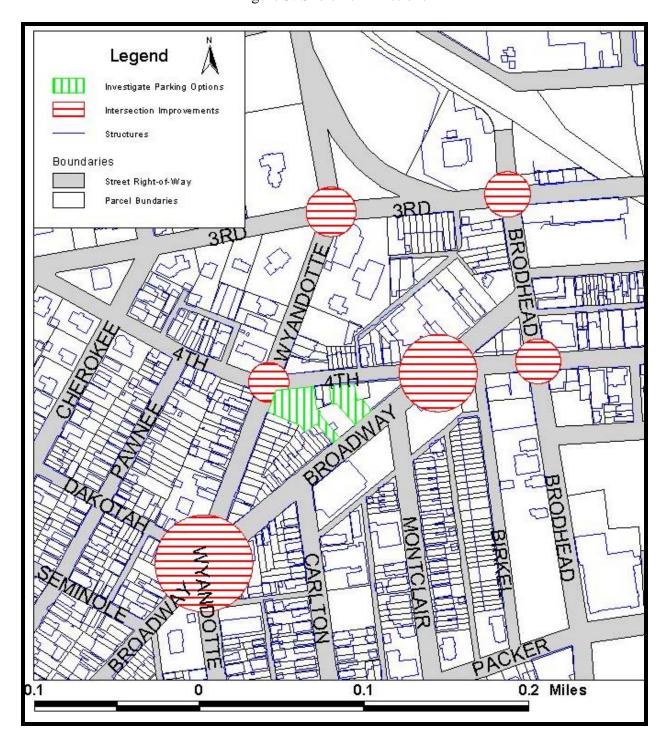
1. Continue investigating acquisition of properties for additional parking and gateway improvements

Pedestrian Safety

- 1. Design streetscape improvements
 - Traffic calming measures
 - o Textured crosswalks
 - o Bulb-outs
 - Decorative lighting
 - Landscaping

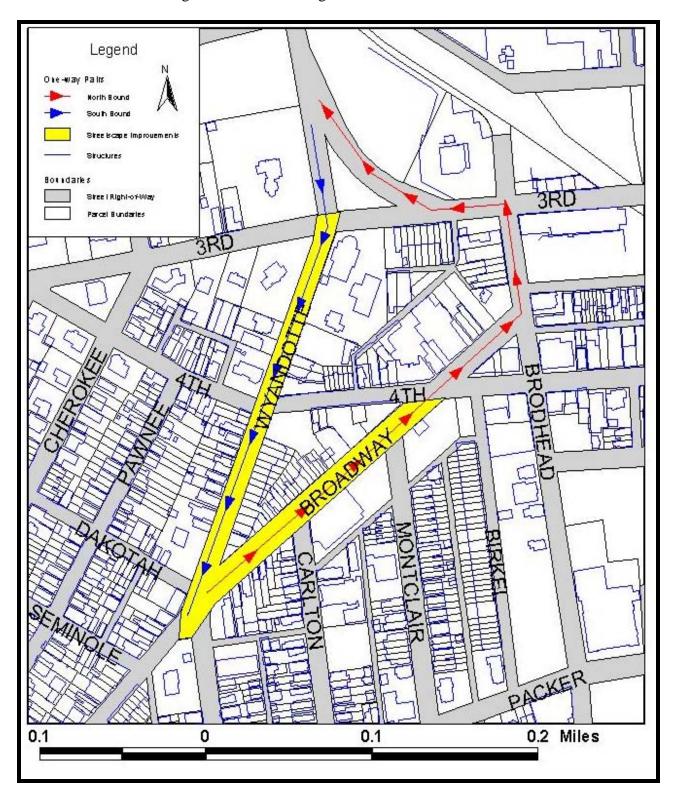
Short-Term Actions

Figure 5: Short Term Actions



Mid and Long Term Recommendations

Figure 6: Mid and Long-Term Recommendations



C. LONG-TERM ACTIONS (24+ months) (Figure 6)

General

1. Implement 5 Points Gateway Enhancement Concept

Traffic

- 1. Implement one-way couple traffic alternative
- 2. Implement signage improvements

Parking

1. Continue investigating acquisition of properties for additional parking and gateway improvements

Pedestrian Safety

- 1. Implement streetscape improvements
 - Traffic calming measures
 - o Textured crosswalks
 - o Bulb-outs
 - Streetscape Enhancements
 - o Decorative lighting
 - o Landscaping

VIII. Conclusion

On Thursday, November 4, 2004, the findings and recommendations contained in this report were presented to City Council. Council Members and the public raised several important and valid questions about the various alternatives, which are summarized in Appendix "B". While there are a number of outstanding issues that must be addressed thought further public involvement, detailed design, and analysis, the results of this study indicate that the 5 Points Gateway Enhancement Concept presents the best opportunity to meet the stated goals for the project in a cost- and time- feasible-manner.

APPENDIX

"A"

Head-to-Head Analysis Of:

Existing Traffic Pattern VS. One-Way Couple

Prepared for:
The City of Bethlehem

Prepared by: Taggart Associates

In association with: Boles Smyth Associates

The Concept of Level of Service (LOS):

LVTS defines congestion as LOS "D" or worse. LOS is a value that reflects driver comfort. It ranges from "A" (best) to "F" (worst). Table 15 shows volume to capacity relationships and operating conditions for various Levels of Service. A volume/capacity ratio is a measure of the volume of traffic carried on a road segment divided by its capacity.

The Concept of Level of Service (LOS)						
Level of Service	Volume / Capacity Ratio	Operating Condition				
\mathbf{A}	0.00 - 0.50	Free Flow				
В	0.51 - 0.70	Free Flow				
C	0.70 - 0.80	Stable Flow, Reduced Maneuverability				
D	0.81 - 0.90	Unstable Flow, Reduced Speed, Reduced Maneuverability				
E	0.91 - 1.00	At Capacity, Flow Disruption, Some Queueing				
F	Greater than 1.00	Fully Congested, Flow Breakdown				

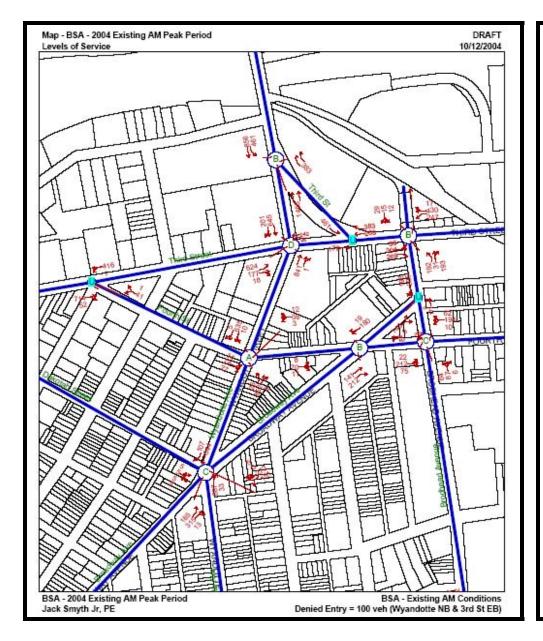
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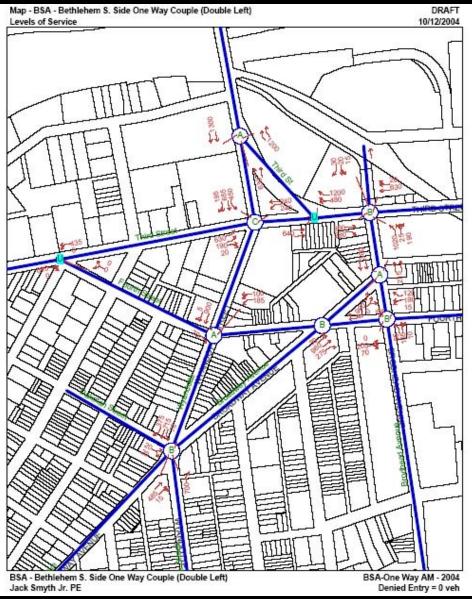
		HEAD-to-HEAD AM PEAK 2004			o-HEAD AK 2004
INTERSECTION	Existing Overall LOS	One-way Overall LOS		Existing Overall LOS	One-way Overall LOS
3rd St./ Rt. 378	В	А		В	Α
3rd St./Wyandotte	D	С		E	С
4th St./Wyandotte	Α	Α		В	В
5 Points Intersection	С	В		E	С
4th St./Broadway	В	В		В	В
4th St./Brodhead	С	В		С	В
Broadway/Brodhead	N/A	А		N/A	А
3rd St./ Brodhead	В	В		В	В

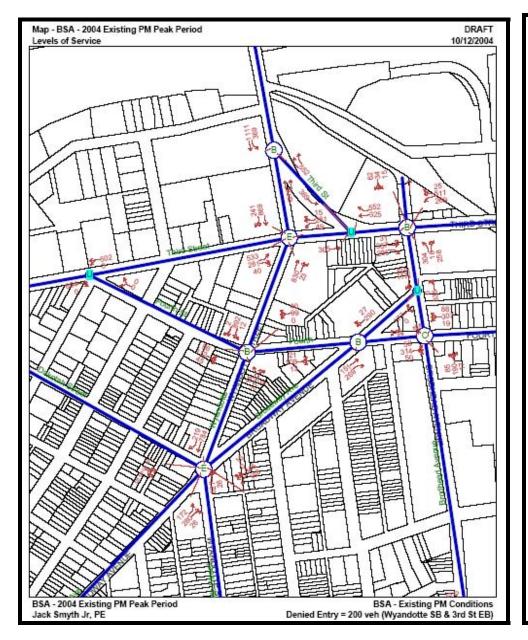
Table: Head-to-Head Analysis of AM and PM Peak Hour Level of Service for 2004 Traffic Levels

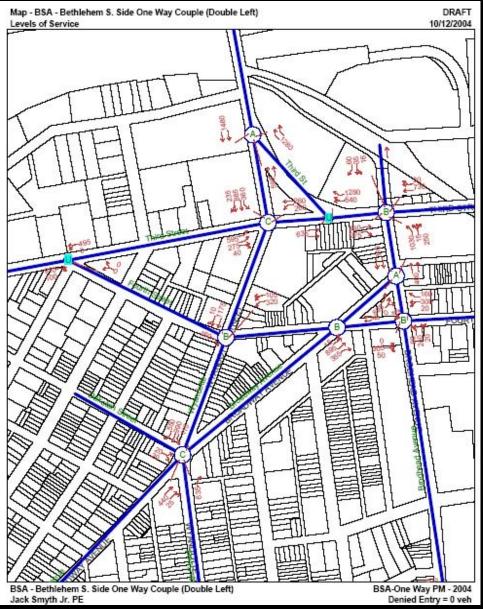
	-	HEAD-to-HEAD AM PEAK 2014			HEAD-to-HEAD PM PEAK 2014		
INTERSECTION	*No-build Overall LOS	One-way Overall LOS		*No-build Overall LOS	One-way Overall LOS		
3rd St./ Rt. 378	D	А		В	А		
3rd St./Wyandotte	E	D		F	D		
4th St./Wyandotte	В	А		С	С		
5 Points Intersection	E	В		F	D		
4th St./Broadway	В	В		С	В		
4th St./Brodhead	С	В		С	В		
Broadway/Brodhead	N/A	В		N/A	А		
3rd St./ Brodhead	В	С		С	С		

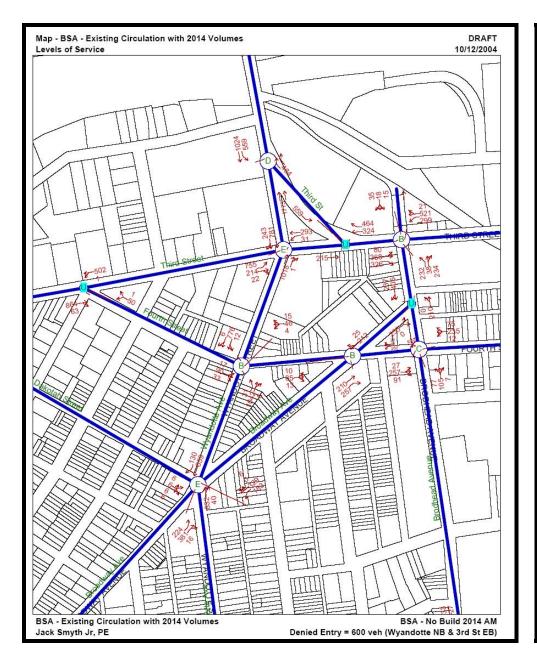
Table: Head-to-Head Analysis of Peak Hour Level of Service for Projected 2014 Traffic Levels *No-build = Existing Traffic Pattern

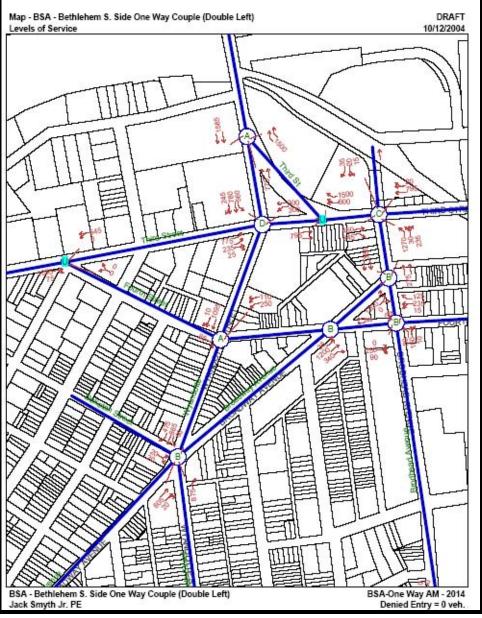


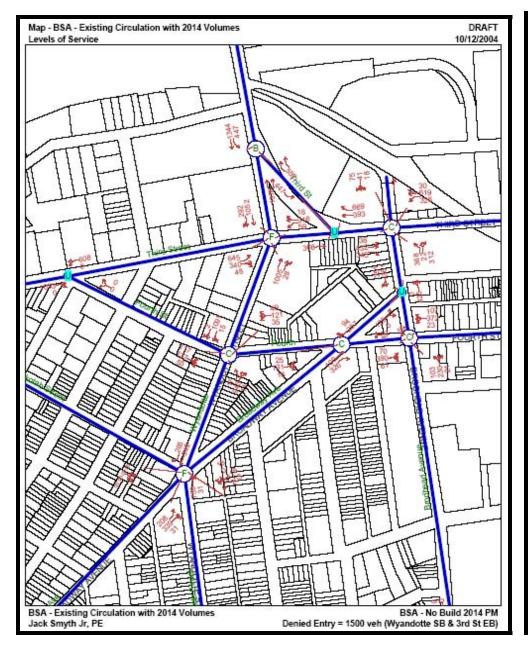


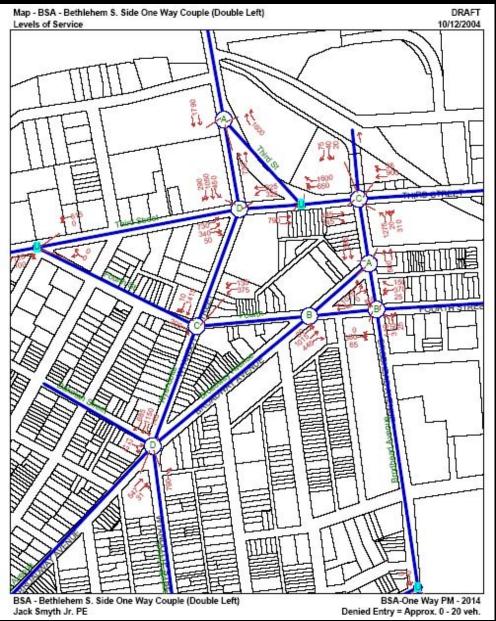












APPENDIX "B"

FREQUENTLY ASKED QUESTIONS ABOUT THE 5 POINTS GATEWAY ENHANCEMENT CONCEPT

Frequently Asked Questions About the 5 Points Gateway Enhancement Concept

1. How will this concept improve pedestrian safety?

First, it reduces the number of lanes carrying traffic and decreases the distance pedestrians have to cross the street. Secondly the addition of on-street parking acts as a buffer between the traffic and pedestrians on the sidewalk creating a more walkable community.

2. How does the concept increase parking?

Of the alternatives analyzed for this study this concept is the only one that will return on-street parking along Wyandotte between 3rd St. and Broadway with out having to acquire private Right-of-Way. Additionally, our parking inventory found that an entire floor of the Flat Iron Parking Deck is underutilized. The City/Parking Authority should consider securing the parking deck and lot on the corner of 4th St. and Wyandotte. If this could be accomplished, we recommend moving the permit parking that is currently in the municipal lot to the parking garage. The lot could then become metered parking for patrons of the local businesses. Currently the lot is leased to the City. The lease expires in roughly two years.

3. How will one-way streets improve congestion in the 5 Points Gateway Area?

Changing the traffic pattern to one-way streets allows the traffic to move more efficiently by removing conflicting turning movements at key intersections and thus allowing more "green time" for through movements. In addition, a high-tech traffic signal would be installed that can respond better to changes in traffic volumes during the course of the day. The preliminary analysis of A.M. and P.M. traffic volumes under the one-way couple alternative shows an overall improvement in the Level of Service for the traffic system, eliminating back-ups that extend across the Hill-to-Hill Bridge and up Wyandotte Hill.

4. Will changing the traffic patterns to one-way streets increase speeding in the area?

No. A combination of measures will be used to control the speed of traffic. The high-tech traffic signal system will use progressive signal timing similar to Center Street on the North side. Numerous traffic calming techniques will be applied including bulb-outs, textured crosswalks, and pedestrian islands similar to the sections of Main St. in downtown Bethlehem and near Moravian College. Finally, improved signage will be used to let drivers know they are entering an urban area and should slow down.

5. Won't one-way streets impede access to my business for customers and deliveries and increase emergency response times?

Access will not be denied to any property under this plan. While the distance one has to travel to access a property or business may increase, the amount of time it takes to arrive at the destination should improve or remain about the same due to the reduction of congestion in the area. This issue will be verified during the next phase of design.

6. Why can't traffic patterns be changed back to the way they were before McDonald's opened?

This alternative could create a potentially unsafe condition for customers making the left off Wyandotte into the parking lot. Using required state sanctioned procedures; there is no evidence of safety issues that would warrant such a change. The change would not improve pedestrian safety or reduce congestion. Finally, the change would not address projected traffic volumes and congestion.

7. Would moving highway traffic onto Broadway and changing it to a one-way street ruin the community's character and natural balance?

This is a value judgment. One-way streets are common in urban areas like the 5 Points Gateway Area. Context sensitive design methods could be used to help improvements "fit in" with the community. A slight increase in traffic volumes on Broadway may occur over the course of the day, but the speeds will be controlled and the streetscape improvements will improve pedestrian safety and thus increase the walkability of the neighborhood.

8. Why are you recommending one-way streets here when the trend appears to be changing one-way streets back to two-way streets i.e. Center and Linden Streets?

One-way traffic systems can handle high volumes of traffic more efficiently. The areas of the City that looked at converting one-way streets into two-way streets experienced major decreases in traffic volumes with the closing of Bethlehem Steel. In contrast, the 5 Points Gateway Area has been experiencing increasing traffic volumes. This is a trend that is expected to continue into the foreseeable future.

9. Does this design accommodate large vehicles including emergency response vehicles and buses?

The preliminary analysis accounted for the large turning radii of large vehicles including buses and emergency vehicles. Details regarding possible changes in specific routes will be addressed during the next phase of design.